Land-Tech

LANDFILL TECHNOLOGIES OF ARECIBO, LLC

Surface Methane Gas Monitoring at the Arecibo Municipal Solid Waste Landfill

Quarterly Event Report

Prepared by:
Landfill Technologies of Arecibo, LLC.

July to September 2018

Bo. Mamey, Carretera 189 km. 9.0, Gurabo, PR 00778 • PO Box 1322 Gurabo, Puerto Rico 00778 • Tel. (787) 273-7639 • Fax (787) 687-0337

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Introduction

Landfill Technologies of Arecibo, LLC (LTA) has conducted on July, August and September of 2018, the surface and perimeter methane gas monitoring event at the Arecibo Municipal Solid Waste Landfill as part of the operation of the Gas Collection and Control System (GCCS). This event is also performed as part of the state and federal agency's for environment requirements for solid waste landfills.

The surface methane gas monitoring was performed by Landfill Technologies of Arecibo, LLC (LTA) personnel during September, 2018 according to the following rule of the "Enmiendas al Reglamento para el Control de la Contaminación Atmosférica de la Junta de Calidad Ambiental para cumplir con los requisitos para Planes Estatales de la Sección 111 (d) de la Ley Federal de Aire Limpio para Implantar las Guías de Emisiones para Sistemas de Relleno Sanitario". This monitoring consisted of obtaining readings with a portable instrument (TVA1000B) surface detector, please refer to Appendix A for specifications of instrument) from landfill surface, groundwater monitoring wells, gas collection system and ambient monitoring.

Objectives

The objective of this event (the surface methane gas monitoring) is to ensure that the concentration of methane (CH_4) generated by the landfill does not exceed the lower explosive limit (LEL) of methane at the facility. The LEL for this monitoring is 500 ppm (parts per million) or 25%. If the personnel of LTA detect any release that exceeds the LEL it will require notification to the owner or operator and an expansion of the monitoring program to determine the vertical and horizontal extent of the release.

Description

The surface methane operational standards consist of monitoring the surface emissions of methane along the entire perimeter of the collection area and along a serpentine patter 30 meter apart (or site specific established spacing) for each collection area using a portable surface detector (TVA1000B – Appendix A).

Sampling Locations and Results

Landfill Technologies of Arecibo, LLC has created samplings locations at the Arecibo Municipal Solid Waste Landfill site where the surface emission readings have been collected. LTA presents the sampling locations at Appendix B. These readings were collected with the portable surface detector (TVA1000B) and are presented in Appendix C.

Conclusions and Recommendations

The surface emissions readings were performed for July, August and September of 2018 monitoring event from the Arecibo Municipal Solid Waste Landfill. This monitoring is part of conclusions quarterly monitoring program aimed to detect abnormal gas release at the landfill. During this event of monitoring the active area (area where the waste was deposited) was located at East side of the landfill. The LTA personnel inspect the area and there were no cracks that present a hazard to the surface.

The results of the surface emission monitoring for July, August and September of 2018 events by LTA personnel indicates that during that period no sampling point monitored exceed the LEL for methane which means that the landfill location does not represent a high risk of explosiveness.

APPENDIX A

Thermo Scientific Portable Toxic Analyzer – TVA1000B
Surface Emission Monitor Specifications

Thermo Scientific
TVA1000B
Toxic Vapor Analyzer

The Only Portable Intrinsically Safe Dual PID/FID Analyzer

Part of Thermo Fisher Scientific

Thermo SCIENTIFIC

Portable Toxic Vapor Analyzer

The Thermo Scientific TVA1000B is the only over-the-shoulder portable vapor analyzer that offers both PID (Photo Ionization Detection) and FID (Flame Ionization Detection) in a single, easy-to-use instrument. The ability to utilize both technologies in this field proven instrument provides benefits in reduced weight and a single user interface. The user can easily monitor and log inorganic and organic vapors simultaneously.

FID Detection

Users can measure a wide variety of organic vapors over an impressive dynamic range (0-50,000 ppm), monitoring some compounds that the PID will not detect. The flame ionization detector operates by breaking hydrocarbon bonds and is not limited by a low ionization potential of the molecule.

Simultaneous FID/PID Detection

No other instrument offers both Photo Ionization and Flame Ionization Detection operating simultaneously in a single portable vapor analyzer. Dual detection eliminates the time, expense and trouble of purchasing and maintaining two separate analyzers.

With PID detection, the user has not only the ability to monitor for organic compounds, but also can detect many inorganic compounds. Some compounds detected by PID and not FID are ammonia, carbon disulfide, carbon tetrachloride, formaldehyde, and hydrogen sulfide. The PID also has the advantage of not requiring fuel or air to operate. In anaerobic environments, the TVA1000B PID can be used.

Key Features

- Simultaneous FID/PID or Single FID detector(s)
- Portable and lightweight
- Multiple response factors and curves
- Multi-point calibration
- On-board datalogging
- 8 hour battery life

Probe Options

Standard Probe
Display measurement values on a 4-character LCD, with measurement units displayed on %, ppm, or ppb. Additionally, a bar graph indicator provides an indication of concentration level. Function keys allow selection of analyzer functions.

Enhanced Probe
Originally designed for Fugitive Emissions monitoring, the enhanced probe has a larger display area than the basic probe. This provides a display of up to 6 lines x 20 characters, plus a double height concentration value. It displays all the same information as the standard probe and has menu-driven access to many of the analyzer functions, allowing them to be easily initiated and/or changed at the probe.

TVA1000B
Data Manager Accessory:
Route Management Probe

Powerful field capabilities
The TVA1000B Data Manager allows users to modify or create route data in the field, eliminating the need for manual recording of data. This helps you comply with the electronic data storage requirements within most consent decrees. The probe has a highly visible 360 degree LED with a pulsed rate linked to concentration.

The DataManager provides access to all of the features previously available only through the sidepack. Users can also easily search and navigate between tags in a route by simply entering the desired tag identifier.

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An optional comment field allows the user to make electronic notes about each tag monitored. An alpha-numeric keypad makes data entry a snap.

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- Custom field labels for more clearly identified route information
- Definable screen layouts optimize user efficiency
- Pick lists lead to consistent data entry and minimize chance of data entry errors
- One button selections to access most commonly used functions
- New sample probe provides 360 degree visual indicator of concentration level
- Cable management system eliminates snagging sample line and electronic cable
- Existing TVA1000 units may be upgraded
- Enhanced filtering system removes dirt and water more efficiently.

Analyzer bag protects TVA1000 and may be used with standard shoulder strap or optional framed backpack

ThermoConnect Software

ThermoConnect enables users of the TVA1000B to transfer, display, analyze, and configure data from the instrument using a computer. ThermoConnect is Windows® based and facilitates the importing of data into other Windows® based applications making it easier to retrieve logged data.

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ThermoConnect has been updated with a powerful new utility to create new route database template files. This utility allows you to easily build your own route database and design the screen appearance through a four-step process. Also, any existing route files in the old file format are still recognized by the TVA and may be upgraded to the new format.

Windows® is a registered trademark of Microsoft Coporation.

Complete DataManager System

Applications

Fugitive Emissions Monitoring
The unique dual detector FID/PID design can handle a wide range of compound vapors present at processing plants. The TVA1000B permits monitoring at lower ppm levels.

Emergency Response
For reliable measurements of hazardous spills or emissions, the TVA1000B responds quickly in an emergency. The ability to quickly detect the presence of "hot spots" is key to locating the source of the hazard.

Hazardous Waste Site Evaluation
The TVA1000B allows quick and easy identification of the hazard location and quantifies the level of contamination.

Underground Storage Tanks
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Thermo Scientific TVA1000B Specifications

Safety certifications	FM (Class 1, Div. 1, Groups A,B,C&D Hazardous Location, Temp. Class T4)
Datalogging	Onboard
Readout	Bar graph & 4- digit LCD
Dynamic Range	0.5-2,000 ppm (PID) isobutylene; 0.5-50,000 ppm (FID) methane
Linear Range	0.5-500 ppm (PID) isobutylene; 0.5-10,000 ppm (FID) methane
Response Time	3.5 seconds
Minimum Detectable Limit	100 ppb benzene (PID); 300 ppb hexane (FID) (laboratory conditions)
Alarms	Low, high, STEL
Sample Flow Rate	1,000 cc/min nominal
Power	Rechargeable NiCd Battery
Logging Capacity	900-18,000 points mode specific
Temperature Range	0-40°C (32°F - 104°F)
Fuel	None required (PID); 99.995% hydrogen (FID)
Portable Operation Time	8 hours (with reference operating conditions)
Approximate Mass	5.8 kg (13 pounds)
Nominal Dimensions	13.5 x 10.3 x 3.2 inches (343 x 262 x 81 mm)
Analog Output	0-2V dc (non-calibrated)
Repeatability	+/- 1% (PID); +/- 2% (FID)
Autoranging	Yes
Diagnostics	Yes
Other Available Options:	
Carrying Case	P/N CR012XL
Charcoal Filter	P/N 510095-1
FID Calibration Kit	P/N CR009UY
PID/FID Calibration Kit	P/N CR012UH

Thermo Scientific products represent a broad range of high-end analytical instruments, chemistry and consumable supplies, laboratory equipment, software and services that enable integrated laboratory workflow solutions. Thermo Scientific is the new name for a trusted brand – Thermo Electron – that the world's most renowned researchers, clinicians and scientists already count on to solve their analytical challenges. The brand is strengthened by the additions equipment, consumables and reagents acquired from Fisher Scientific.

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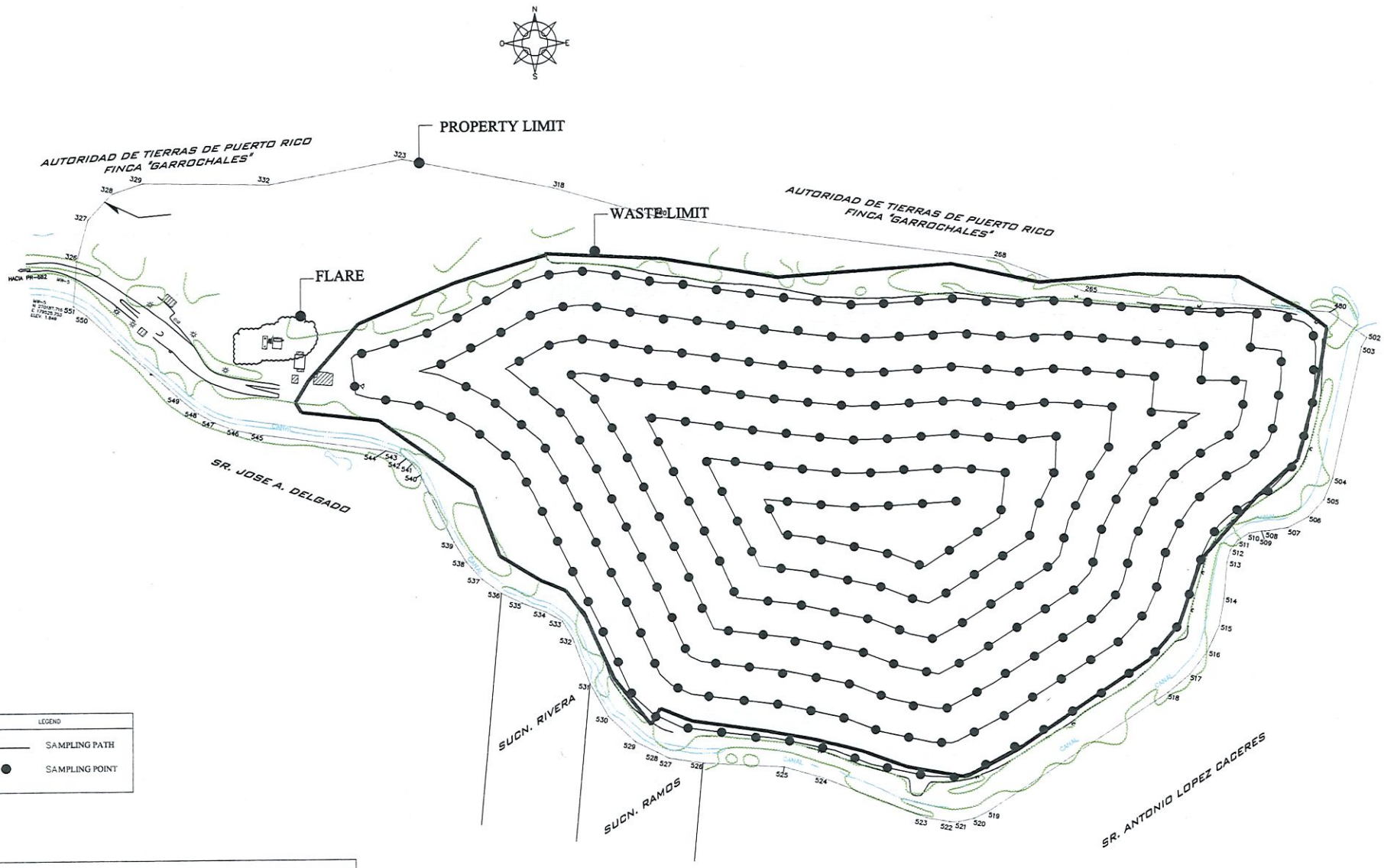
Franklin, MA
02038

1.866.282.0430
1.508.520.1460 fax

Thermo SCIENTIFIC

APPENDIX B

Sampling Points Locations from Arecibo Municipal Landfill



NOTES:

1. SEM PATH SHOWN IS FOR FINAL GRADES. SEM CONDUCTED WHILE THE LANDFILL IS AT INTERIM GRADES MAY VARY FROM THE PATH SHOWN. RECORDS OF THE PATH FOLLOWED WILL BE MAINTAINED BY THE FACILITY.
2. SEM PATH WILL BE SPACED 30 M APART IN ACCORDANCE WITH NSPS RULES.

REVISION	DATE	BY	#

ARECIBO MUNICIPAL SOLID WASTE LANDFILL
ARECIBO, P.R

LANDFILL TECHNOLOGIES OF ARECIBO, CORP.

SURFACE EMISSIONS MONITORING
SAMPLING PATH

DRAWING: S-100
SCALE:
DATE: 01/2010

APPENDIX C

Surface Emission Readings

LANDFILL TECHNOLOGIES OF ARECIBO LLC
SURFACE EMISSION MONITORING – ARECIBO LANDFILL
SEPTEMBER 2018

TAG	FID	CONCENTRATION	CONCENTRATION UNITS	TYPE
UPWIND	FID	2.75	PPM	FE
DOWNWIND	FID	4.67	PPM	FE
POINT001	FID	3.38	PPM	FE
POINT002	FID	9.85	PPM	FE
POINT003	FID	8.39	PPM	FE
POINT004	FID	9.46	PPM	FE
POINT005	FID	10.09	PPM	FE
POINT006	FID	8.3	PPM	FE
POINT007	FID	7.94	PPM	FE
POINT008	FID	19.95	PPM	FE
POINT009	FID	36.63	PPM	FE
POINT010	FID	46.82	PPM	FE
POINT011	FID	35.98	PPM	FE
POINT012	FID	35.71	PPM	FE
POINT013	FID	24.64	PPM	FE
POINT014	FID	47.81	PPM	FE
POINT015	FID	111.36	PPM	FE
POINT016	FID	20.78	PPM	FE
POINT017	FID	13.13	PPM	FE
POINT018	FID	13.25	PPM	FE
POINT019	FID	12.12	PPM	FE
POINT020	FID	9.09	PPM	FE
POINT021	FID	9.67	PPM	FE
POINT022	FID	12.99	PPM	FE
POINT023	FID	8.42	PPM	FE
POINT024	FID	6.32	PPM	FE
POINT025	FID	12.37	PPM	FE
POINT026	FID	7.81	PPM	FE
POINT027	FID	11.68	PPM	FE
POINT028	FID	5.97	PPM	FE
POINT029	FID	6.01	PPM	FE
POINT030	FID	15.07	PPM	FE
POINT031	FID	17.98	PPM	FE
POINT032	FID	45.14	PPM	FE
POINT033	FID	14.66	PPM	FE
POINT034	FID	19.51	PPM	FE
POINT035	FID	8.93	PPM	FE
POINT036	FID	15.47	PPM	FE
POINT037	FID	21.01	PPM	FE
POINT038	FID	19.18	PPM	FE
POINT039	FID	39.4	PPM	FE
POINT040	FID	11.38	PPM	FE
POINT041	FID	8.83	PPM	FE
POINT042	FID	47.17	PPM	FE
POINT043	FID	19.86	PPM	FE

LANDFILL TECHNOLOGIES OF ARECIBO LLC
SURFACE EMISSION MONITORING – ARECIBO LANDFILL
SEPTEMBER 2018

TAG	FID	CONCENTRATION	CONCENTRATION UNITS	TYPE
POINT044	FID	36.31	PPM	FE
POINT045	FID	19.72	PPM	FE
POINT046	FID	8.35	PPM	FE
POINT047	FID	13.64	PPM	FE
POINT048	FID	9.71	PPM	FE
POINT049	FID	8.02	PPM	FE
POINT050	FID	8.21	PPM	FE
POINT051	FID	11.01	PPM	FE
POINT052	FID	5.43	PPM	FE
POINT053	FID	9.11	PPM	FE
POINT054	FID	10.08	PPM	FE
POINT055	FID	2.92	PPM	FE
POINT056	FID	3.4	PPM	FE
POINT057	FID	5.62	PPM	FE
POINT058	FID	8.16	PPM	FE
POINT059	FID	8.51	PPM	FE
POINT060	FID	6.68	PPM	FE
POINT061	FID	7.79	PPM	FE
POINT062	FID	8.95	PPM	FE
POINT063	FID	11.21	PPM	FE
POINT064	FID	7.52	PPM	FE
POINT065	FID	9	PPM	FE
POINT066	FID	4.95	PPM	FE
POINT067	FID	88.72	PPM	FE
POINT068	FID	25.35	PPM	FE
POINT069	FID	85.11	PPM	FE
POINT070	FID	49.11	PPM	FE
POINT071	FID	94.86	PPM	FE
POINT072	FID	167.36	PPM	FE
POINT073	FID	238.36	PPM	FE
POINT074	FID	325.36	PPM	FE
POINT075	FID	139.36	PPM	FE
POINT076	FID	89.69	PPM	FE
POINT077	FID	71.09	PPM	FE
POINT078	FID	37.74	PPM	FE
POINT079	FID	49.23	PPM	FE
POINT080	FID	62.42	PPM	FE
POINT081	FID	43.91	PPM	FE
POINT082	FID	142.36	PPM	FE
POINT083	FID	206.36	PPM	FE
POINT084	FID	158.36	PPM	FE
POINT085	FID	119.36	PPM	FE
POINT086	FID	92.09	PPM	FE
POINT087	FID	141.36	PPM	FE
POINT088	FID	69.16	PPM	FE

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SEPTEMBER 2018

TAG	FID	CONCENTRATION	CONCENTRATION UNITS	TYPE
POINT089	FID	94.63	PPM	FE
POINT090	FID	18.45	PPM	FE
POINT091	FID	84.95	PPM	FE
POINT092	FID	69.68	PPM	FE
POINT093	FID	118.36	PPM	FE
POINT094	FID	17.06	PPM	FE
POINT095	FID	13.06	PPM	FE
POINT096	FID	14.13	PPM	FE
POINT097	FID	17.13	PPM	FE
POINT098	FID	12.47	PPM	FE
POINT099	FID	12.38	PPM	FE
POINT100	FID	38.39	PPM	FE
POINT101	FID	25.81	PPM	FE
POINT102	FID	199.36	PPM	FE
POINT103	FID	77.37	PPM	FE
POINT104	FID	62.37	PPM	FE
POINT105	FID	112.36	PPM	FE
POINT106	FID	44.9	PPM	FE
POINT107	FID	8.42	PPM	FE
POINT108	FID	4	PPM	FE
POINT109	FID	32.42	PPM	FE
POINT110	FID	38.99	PPM	FE
POINT111	FID	79.5	PPM	FE
POINT112	FID	110.36	PPM	FE
POINT113	FID	104.36	PPM	FE
POINT114	FID	101.22	PPM	FE
POINT115	FID	159.36	PPM	FE
POINT116	FID	107.36	PPM	FE
POINT117	FID	156.36	PPM	FE
POINT118	FID	69.12	PPM	FE
POINT119	FID	80.16	PPM	FE
POINT120	FID	98.86	PPM	FE
POINT121	FID	81.32	PPM	FE
POINT122	FID	77.07	PPM	FE
POINT123	FID	120.36	PPM	FE
POINT124	FID	112.36	PPM	FE
POINT125	FID	76.97	PPM	FE
POINT126	FID	134.36	PPM	FE
POINT127	FID	146.36	PPM	FE
POINT128	FID	91.58	PPM	FE
POINT129	FID	209.36	PPM	FE
POINT130	FID	250.36	PPM	FE
POINT131	FID	158.36	PPM	FE
POINT132	FID	168.36	PPM	FE

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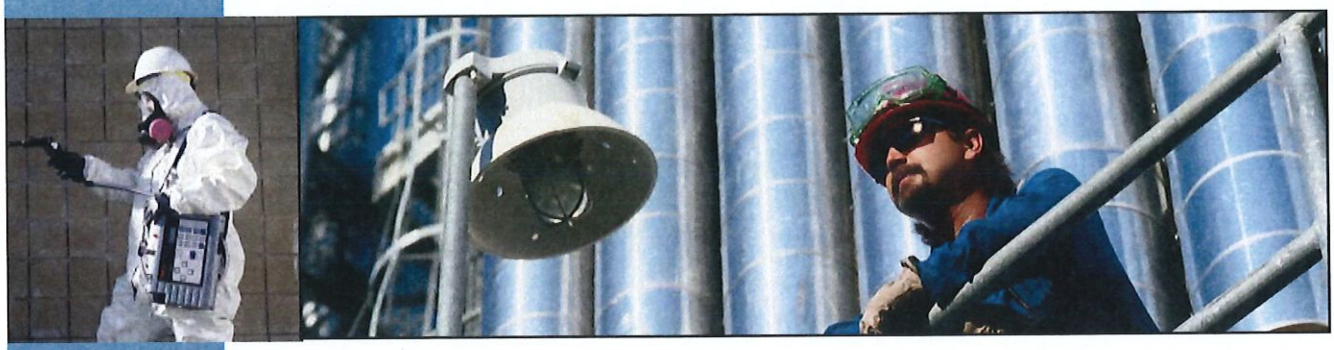

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Alarms	Low, high, STEL
Sample Flow Rate	1,000 cc/min nominal
Power	Rechargeable NiCd Battery
Logging Capacity	900-18,000 points mode specific
Temperature Range	0-40°C (32°F - 104°F)
Fuel	None required (PID); 99.995% hydrogen (FID)
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Repeatability	+/- 1% (PID); +/- 2% (FID)
Autoranging	Yes
Diagnostics	Yes
Other Available Options:	
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Charcoal Filter	P/N 510095-1
FID Calibration Kit	P/N CR009UY
PID/FID Calibration Kit	P/N CR012UH

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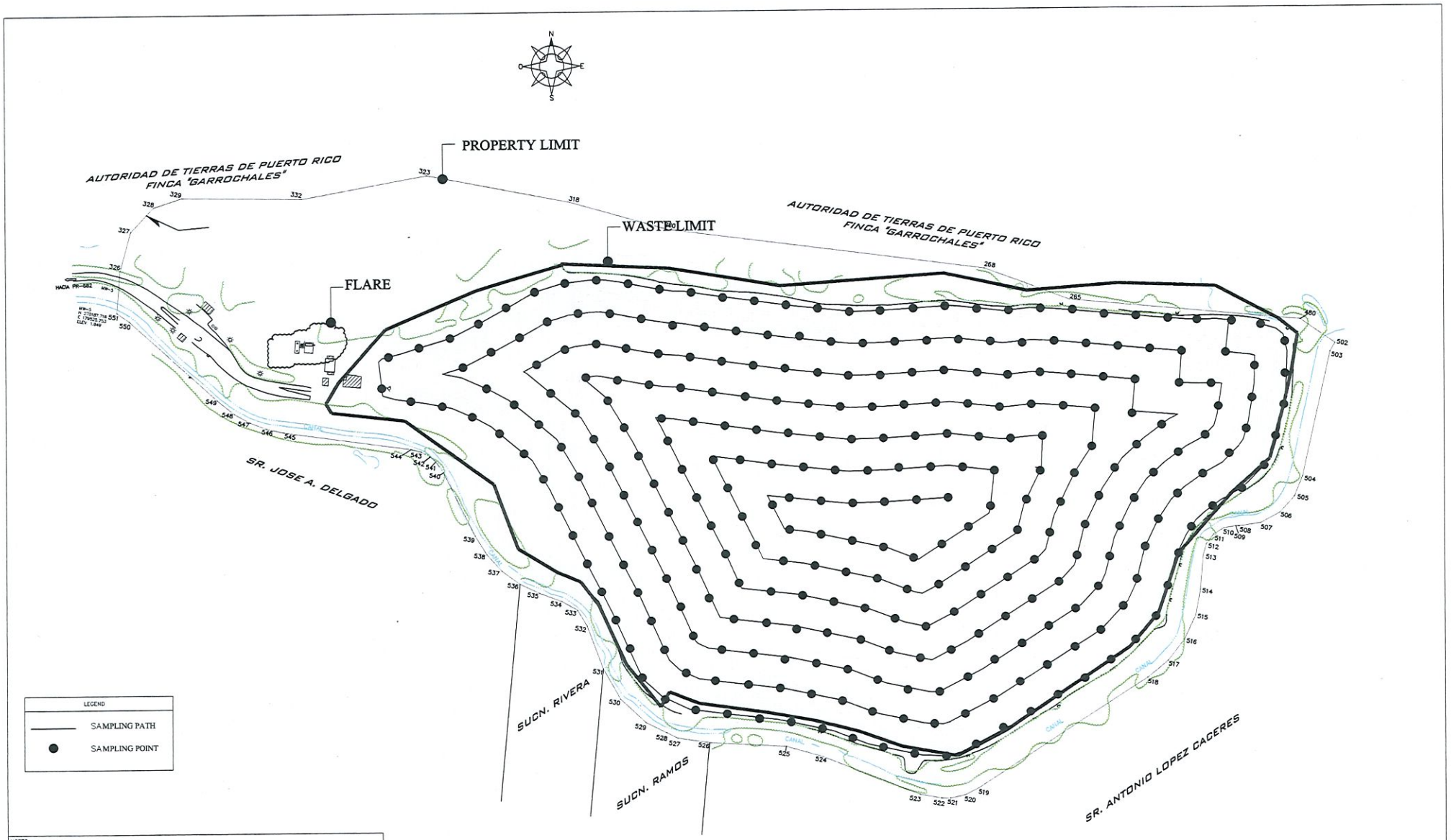
APPENDIX B

Sampling Points Locations from Arecibo Municipal Landfill



NOTES:

1. SEM PATH SHOWN IS FOR FINAL GRADES. SEM CONDUCTED WHILE THE LANDFILL IS AT INTERIM GRADES MAY VARY FROM THE PATH SHOWN. RECORDS OF THE PATH FOLLOWED WILL BE MAINTAINED BY THE FACILITY.
2. SEM PATH WILL BE SPACED 30 M APART IN ACCORDANCE WITH NSPS RULES.

REVISION	DATE	BY	#

ARECIBO MUNICIPAL SOLID WASTE LANDFILL
ARECIBO, P.R

LANDFILL TECHNOLOGIES OF ARECIBO, CORP.

SURFACE EMISSIONS MONITORING
SAMPLING PATH

DRAWING: S-100
SCALE:
DATE: 01/2010

APPENDIX C

Surface Emission Readings

LANDFILL TECHNOLOGIES OF ARECIBO LLC

SURFACE EMISSION MONITORING – ARECIBO LANDFILL

DECEMBER 2018

TAG	FID	CONCENTRATION	CONCENTRATION UNITS	TYPE	TYPE
UPWIND	FID	3.16	PPM	OK	FE
DOWNWIND	FID	6.93	PPM	OK	FE
POINT1	FID	3.04	PPM	OK	FE
POINT2	FID	11.82	PPM	OK	FE
POINT3	FID	12.42	PPM	OK	FE
POINT4	FID	10.09	PPM	OK	FE
POINT5	FID	19.59	PPM	OK	FE
POINT6	FID	6.19	PPM	OK	FE
POINT7	FID	10.75	PPM	OK	FE
POINT8	FID	14.88	PPM	OK	FE
POINT9	FID	46.41	PPM	OK	FE
POINT10	FID	59.32	PPM	OK	FE
POINT11	FID	45.59	PPM	OK	FE
POINT12	FID	47.85	PPM	OK	FE
POINT13	FID	38.93	PPM	OK	FE
POINT14	FID	56.42	PPM	OK	FE
POINT15	FID	165.37	PPM	OK	FE
POINT16	FID	30.86	PPM	OK	FE
POINT17	FID	19.50	PPM	OK	FE
POINT18	FID	19.68	PPM	OK	FE
POINT19	FID	18.00	PPM	OK	FE
POINT20	FID	12.27	PPM	OK	FE
POINT21	FID	14.36	PPM	OK	FE
POINT22	FID	19.29	PPM	OK	FE
POINT23	FID	12.50	PPM	OK	FE
POINT24	FID	9.39	PPM	OK	FE
POINT25	FID	18.37	PPM	OK	FE
POINT26	FID	11.60	PPM	OK	FE
POINT27	FID	29.20	PPM	OK	FE
POINT28	FID	8.06	PPM	OK	FE
POINT29	FID	8.92	PPM	OK	FE
POINT30	FID	22.38	PPM	OK	FE
POINT31	FID	15.28	PPM	OK	FE
POINT32	FID	67.03	PPM	OK	FE
POINT33	FID	21.77	PPM	OK	FE
POINT34	FID	28.97	PPM	OK	FE
POINT35	FID	8.04	PPM	OK	FE
POINT36	FID	18.56	PPM	OK	FE
POINT37	FID	31.09	PPM	OK	FE
POINT38	FID	20.47	PPM	OK	FE
POINT39	FID	76.51	PPM	OK	FE
POINT40	FID	8.49	PPM	OK	FE
POINT41	FID	11.96	PPM	OK	FE
POINT42	FID	35.19	PPM	OK	FE
POINT43	FID	25.16	PPM	OK	FE

LANDFILL TECHNOLOGIES OF ARECIBO LLC
SURFACE EMISSION MONITORING – ARECIBO LANDFILL
DECEMBER 2018

TAG	FID	CONCENTRATION	CONCENTRATION UNITS	TYPE	TYPE
POINT44	FID	108.93	PPM	OK	FE
POINT45	FID	177.48	PPM	OK	FE
POINT46	FID	9.60	PPM	OK	FE
POINT47	FID	11.59	PPM	OK	FE
POINT48	FID	14.42	PPM	OK	FE
POINT49	FID	11.91	PPM	OK	FE
POINT50	FID	12.19	PPM	OK	FE
POINT51	FID	9.91	PPM	OK	FE
POINT52	FID	6.52	PPM	OK	FE
POINT53	FID	27.33	PPM	OK	FE
POINT54	FID	90.72	PPM	OK	FE
POINT55	FID	3.36	PPM	OK	FE
POINT56	FID	2.89	PPM	OK	FE
POINT57	FID	8.35	PPM	OK	FE
POINT58	FID	12.12	PPM	OK	FE
POINT59	FID	12.64	PPM	OK	FE
POINT60	FID	6.01	PPM	OK	FE
POINT61	FID	9.35	PPM	OK	FE
POINT62	FID	26.85	PPM	OK	FE
POINT63	FID	100.89	PPM	OK	FE
POINT64	FID	8.65	PPM	OK	FE
POINT65	FID	7.65	PPM	OK	FE
POINT66	FID	7.35	PPM	OK	FE
POINT67	FID	131.75	PPM	OK	FE
POINT68	FID	37.64	PPM	OK	FE
POINT69	FID	76.60	PPM	OK	FE
POINT70	FID	58.93	PPM	OK	FE
POINT71	FID	284.58	PPM	OK	FE
POINT72	FID	192.46	PPM	OK	FE
POINT73	FID	274.11	PPM	OK	FE
POINT74	FID	276.56	PPM	OK	FE
POINT75	FID	206.95	PPM	OK	FE
POINT76	FID	133.19	PPM	OK	FE
POINT77	FID	105.57	PPM	OK	FE
POINT78	FID	56.04	PPM	OK	FE
POINT79	FID	44.31	PPM	OK	FE
POINT80	FID	74.90	PPM	OK	FE
POINT81	FID	131.73	PPM	OK	FE
POINT82	FID	163.71	PPM	OK	FE
POINT83	FID	237.31	PPM	OK	FE
POINT84	FID	134.61	PPM	OK	FE
POINT85	FID	177.25	PPM	OK	FE
POINT86	FID	136.75	PPM	OK	FE
POINT87	FID	209.92	PPM	OK	FE
POINT88	FID	102.70	PPM	OK	FE

LANDFILL TECHNOLOGIES OF ARECIBO LLC
SURFACE EMISSION MONITORING – ARECIBO LANDFILL
DECEMBER 2018

TAG	FID	CONCENTRATION	CONCENTRATION UNITS	TYPE	TYPE
POINT89	FID	85.17	PPM	OK	FE
POINT90	FID	22.14	PPM	OK	FE
POINT91	FID	254.85	PPM	OK	FE
POINT92	FID	80.13	PPM	OK	FE
POINT93	FID	136.11	PPM	OK	FE
POINT94	FID	14.50	PPM	OK	FE
POINT95	FID	19.39	PPM	OK	FE
POINT96	FID	20.98	PPM	OK	FE
POINT97	FID	25.44	PPM	OK	FE
POINT98	FID	18.52	PPM	OK	FE
POINT99	FID	11.14	PPM	OK	FE
POINT100	FID	46.07	PPM	OK	FE
POINT101	FID	77.43	PPM	OK	FE
POINT102	FID	229.26	PPM	OK	FE
POINT103	FID	88.98	PPM	OK	FE
POINT104	FID	53.01	PPM	OK	FE
POINT105	FID	166.85	PPM	OK	FE
POINT106	FID	66.68	PPM	OK	FE
POINT107	FID	12.50	PPM	OK	FE
POINT108	FID	5.94	PPM	OK	FE
POINT109	FID	29.18	PPM	OK	FE
POINT110	FID	46.79	PPM	OK	FE
POINT111	FID	238.50	PPM	OK	FE
POINT112	FID	126.91	PPM	OK	FE
POINT113	FID	120.01	PPM	OK	FE
POINT114	FID	86.04	PPM	OK	FE
POINT115	FID	236.65	PPM	OK	FE
POINT116	FID	159.43	PPM	OK	FE
POINT117	FID	232.19	PPM	OK	FE
POINT118	FID	102.64	PPM	OK	FE
POINT119	FID	72.14	PPM	OK	FE
POINT120	FID	118.63	PPM	OK	FE
POINT121	FID	243.96	PPM	OK	FE
POINT122	FID	88.63	PPM	OK	FE
POINT123	FID	138.41	PPM	OK	FE
POINT124	FID	95.51	PPM	OK	FE
POINT125	FID	114.30	PPM	OK	FE
POINT126	FID	199.52	PPM	OK	FE
POINT127	FID	217.34	PPM	OK	FE
POINT128	FID	136.00	PPM	OK	FE
POINT129	FID	188.42	PPM	OK	FE
POINT130	FID	95.42	PPM	OK	FE
POINT131	FID	84.43	PPM	OK	FE
POINT132	FID	193.61	PPM	OK	FE